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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,225	03/09/2001	Rosa Maria Covarrubias	3597-118-01	6802

7590 12/19/2001

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EXAMINER

CHIN, PETER

ART UNIT PAPER NUMBER

1731

DATE MAILED: 12/19/2001

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Please find below and/or attached an Office communication concerning this application or proceeding.

#7 1st Off Act.

Office Action Summary

Application No.

09/803,225

Applicant(s)

COVARRUBIAS, ROSA MARIA

Examiner

Peter Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other:

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DETAILED ACTION

1. Claims 1 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "... cationic conditions or combinations thereof.." is not understood since it is not known what "combinations" refer to. If it is cationic conditions, what is the combination?

2. Claims 1, 4-13, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (5,221,435) taken in view of Braitberg (3,234,075) or Bugosh (2,917,426).

Smith shows a method of improving retention in paper making. Smith adds a cationic polymer coagulant, which includes cationic polyacrylamide (column 7). A cationic alumina microparticles is employed in conjunction with an anionic polymer retention aid.

Braitberg teaches the addition of boehmite, which is a cationic fibrous alumina microparticle, to flocculate pitch particles, clays, fillers, gums and starches, (column 1). The boehmite attaches and retains these components of the paper making furnish to the pulp fibers (last paragraph of column 3 spanning column 4).

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Bugosh teaches that boehmite microparticles added to pulp slurry containing filler and binders synergistically improves bonding. Filler retention is likewise improved, see Example 9, column 12.

Therefore in view of the superior performance of Boehmite, a cationic fibrous microparticulate form of alumina in achieving retention and strength making paper, it would have been obvious to employ it as the cationic alumina microparticle in Smith

It is noted in regard to the apparatus claims 17-21. The apparatus per se, is merely the standard apparatus for paper making. The only difference is the additives, which do not impart any structural difference to the apparatus already disclosed by Smith. In any case if additional evidence is required see the prior art by Applicant and those cited below.

3. Claims 2,3, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (5,221,435) taken in view of Braitberg (3,234,075) or Bugosh (2,917,426) as applied to claims 1,4-13, and 16-22 above, and further in view of Sippel (WO 97/41063).

It would have been obvious to employ the acetate salt of boehmite in view of the superior flocculating activity as taught by Sippel

4. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (5,221,435) taken in view of Braitberg (3,234,075) or Bugosh (2,917,426) as applied to claims 1, 4-13, and 16-22 above, and further in view of Sarkar et al (5,169,497 or 5,507,914).

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It would have been further obvious to add a cellulase enzyme to the pulp furnish since it advantageously improves the freeness of the pulp furnish as taught by Sarkar et al.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

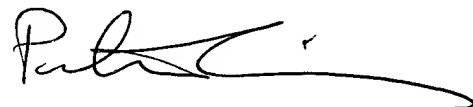
Carre et al (5,496,440) discloses a retention system that uses cationic aluminum hydroxide.

Pruszyński (5,942,087) shows typical paper making machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Chin whose telephone number is (703) 308-2046. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (703) 308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



Peter Chin
Primary Examiner
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